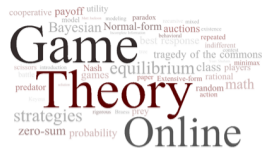




Incomplete Information in the Extensive Form: Beyond Subgame Perfection

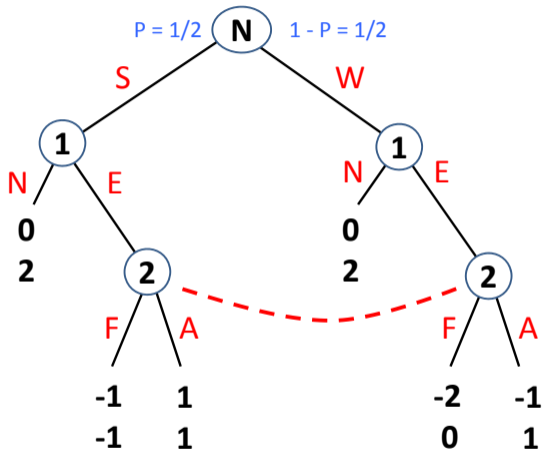
Game Theory Course:
Jackson, Leyton-Brown & Shoham

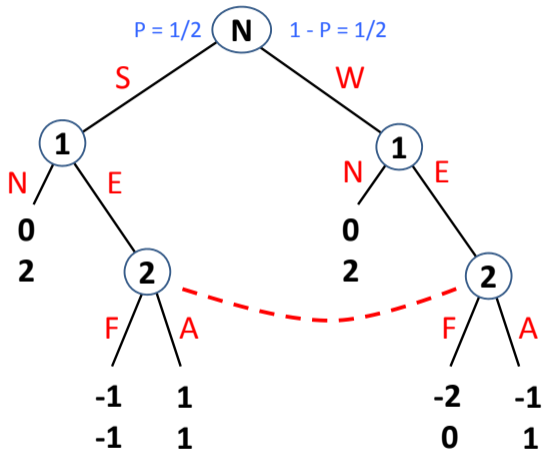


Solving Incomplete Information Extensive Form Games

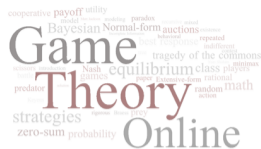


- With incomplete information there may not be many proper subgames
- But we can extend the reasoning

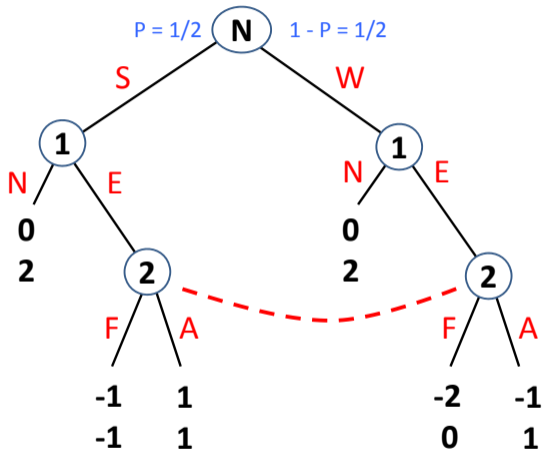




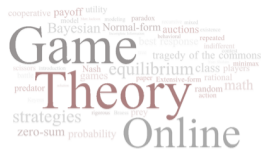
Solving Incomplete Information Extensive Form Games



- Equilibrium concepts that explicitly model players' beliefs about where they are in the tree for every information set (what the other players have done)
- Sequential Equilibrium and Perfect Bayesian Equilibrium - key features:
 - Beliefs are not contradicted by the actual play of the game (on the equilibrium path)
 - Players best respond to their beliefs



Solving Incomplete Information Extensive Form Games



- With incomplete information there may not be many proper subgames
- The ideas of sequential rationality extend once beliefs are modeled...